

RISKS TO THE FORECAST

The FAA is confident that its current outlook for aviation demand and activity can be achieved, evidenced by the resiliency of the demand for air transportation in the face of challenges. As has been the case for the past several years, terrorism remains the greatest risk to achieving the forecasts. Tighter security measures have restored the public's confidence in the integrity of U.S. and world aviation security systems. However, because of aviation's high visibility and global reach, concerns remain about international terrorism. Any terrorist incident aimed at aviation would have an immediate and significant impact on the demand for aviation services. In addition, there has been much discussion about a world-wide pandemic with the Asian flu. Should such an event occur, it is likely that severe limits on aviation would be enacted and would have a significant impact on the demand for aviation services.

Terrorist and pandemic concerns notwithstanding, this year's forecast is driven, at least in the short-term, by the improving financial health of the commercial aviation industry, which, in turn, is tied to the price of jet fuel and the health of the U.S. economy.

Oil prices peaked at over \$77/barrel in early August 2006 and then fell below \$56/barrel by mid-November. However, prices then gradually rose to over \$63/barrel by mid-December. Most economic projections now assume that oil prices will remain in the \$55-\$65/barrel range over the next several years, with \$50/barrel being touted as the new floor for future oil prices.

Higher fuel prices cost U.S. commercial air carriers \$8.9 billion in fiscal year 2006, essentially wiping out the significant improvements made by the network carriers in reducing their operating costs. The network carriers, which currently account for 59 percent of the industry's domestic capacity and carry 50 percent of the industry's domestic passengers, are most at risk from higher fuel prices. If oil prices (and jet kerosene prices) had stayed at 2005 levels in 2006, most carriers, including several network carriers, would have generated net profits. This year's forecast assumes \$57/barrel oil in 2007, rising to \$61/barrel in 2008-09 and then gradually falling back to \$58/barrel by 2013. In a high oil price scenario, the potential exists for major supply disruptions/dislocations and/or increased passenger inconveniences, either of which could significantly lessen capacity and passenger demand and reduce competition in many markets. In a \$100/barrel plus scenario, supply disruptions would most likely occur through liquidation and/or further contraction of mainline carrier route structures. Under this scenario, several large U.S. airports could lose their major service provider.

Although FAA uses economic projections from OMB to derive the forecasts of aviation demand, an important part of the FAA forecast process is to compare the OMB forecasts with other economic forecasts. FAA typically compares OMB economic forecasts to those of Global Insight, Inc., a leading economic consulting firm. Global Insight's U.S. GDP forecast is similar to OMB's. Both Global Insight and OMB are projecting U.S. GDP growth to average 3.0 percent a year between 2006 and 2010. In addition, Global Insight regularly provides alternative forecasts and assigns a likelihood of their occurrence; along with the likelihood of the baseline forecast occurring. In January 2007, Global Insight was assigning a 60 percent likelihood of their baseline forecast. An optimistic scenario—higher economic growth in

the rest of the world, lower oil prices, and a continuation of the information-driven technology boom—that results in higher U.S. economic growth was assigned a 20 percent likelihood by Global Insight. Higher economic growth would lead to increased demand for aviation services and speed the industry's return to profitability.

However, Global Insight's pessimistic scenario—a weaker dollar, rising oil prices, higher inflation, a deeper housing downturn, and rising unemployment—that results in slower U.S. economic growth was assigned a 20 percent likelihood. Slower economic growth would not only slow the recovery in the demand for aviation services but would also hamper and slow the industry's return to profitability.

Low-cost carriers are forecast to continue to increase their share of domestic traffic over the forecast period through a large increase in their fleet. However, except for Southwest, the 2006 financial performance of these carriers was, at best, mixed. There appears to be a good deal of uncertainty as to whether or not the low-cost carriers, with their present business models, can profitably deploy all of the aircraft they are scheduled to take in the next few years. Although most of the current low-cost carriers appear to have greater financial stability and access to funding than previous start-ups, continued high fuel prices, a prolonged slump in travel demand, and/or a prolonged fare war could cause these carriers to scale back planned growth and/or cease operations. In addition, low-cost carriers have a significantly smaller percentage of their future fuel needs hedged. If jet fuel prices go higher than are forecast, the cost gap between low-cost carriers and the network carriers should narrow, further reducing the competitive advantage that many of the low-cost carriers currently enjoy. Any loss of competition could lead to higher fares and a loss of passenger demand.

Also, the forecast assumes the addition of sizable numbers of regional jets into the fleet of regional carriers. However, the regional carriers' future is closely tied to those of the larger network carriers. Should one or more of these large carriers cease to exist (two are operating under Chapter 11 bankruptcy protection), certain regional carriers could find themselves either saddled with excess capacity or lack of sufficient capacity, or lack of feed traffic. Already in both the Delta and Northwest bankruptcies, regional partners are seeing network carrier needs for regional flying substantially reduced.

Consolidation in the airline industry is another risk to the forecast despite US Airways' unsuccessful attempt to acquire Delta. Some carriers, particularly United, have made it clear that they believe consolidation is necessary for the long-term stability/profitability of the industry and, in fact, United and Continental held merger discussions.¹⁰ If consolidation were to occur, it is likely to lessen competition in many markets. Less competition could lead to higher fares for the flying public and lower travel demand.

The global economy continued to perform well in 2006, posting strong gains in many regions of the world. Although the current forecast calls for continuation of high growth rates throughout the forecast period, there are many downside risks inherent in these forecasts. The health of the global economy will continue to depend on the sustainability and strength of U.S. economic growth, with most world regions counting on strong export growth to the United States as a major contributor to their future economic growth. If, as predicted, the U.S. dollar continues to fall, strong U.S. economic growth may not translate into strong U.S. import growth. If this occurs, global economic growth could remain sluggish for some time into the future.

¹⁰ *Airline Industry Buzzes With Merger Talk. (Source: New York Times, Wednesday, December 13, 2006)*

Furthermore, much of the growth that is currently occurring is concentrated in a relatively few countries such as China and India. Because so much of the current growth is concentrated in a few countries, the risk that a local event could quickly have widespread consequences increases. In addition, there are potential geopolitical risks that could slow global economic growth, i.e., the uncertain political situations in several major oil exporting countries. Doubts remain over the strength of domestic demand in both Japan and the Eurozone as these areas continue to be constrained by structural economic problems, institutional constraints, and the authorities' reluctance to take decisive action. The current forecasts assume strong passenger growth for travel between the United States and other world regions. Any slowing of global economic activity could seriously inhibit the growth in world passenger demand.

On the other hand, loosening of international regulatory constraints could drive growth higher than what is projected. Historically, international markets have been subject to a series of bilateral agreements that have, for the most part, severely restricted competition. Although the latest round of negotiations between the U.S. and the European Union were unsuccessful in reaching a more liberal agreement, it is likely that sometime during the forecast horizon, further liberalization of the North Atlantic market will happen. If it does, more U.S. carriers could gain access to new markets and introduce new competition in the North Atlantic market. Greater competition could lead to lower fares and higher growth in these markets.

The demand for general aviation products and services, especially business jets, appears to be expanding. How long the industry expansion continues depends, in large part, on the strength of the market for business jets and microjets. The market for business jets is largely dependent upon the growth in the economy and corporate profits and it is unknown how well this market will fare in the face of an economic downturn or a slowdown in corporate profit growth.

The current forecast assumes the introduction of low priced micro jets starting in 2007, with the market growing to 6,300 by 2020. This is in the middle of a fairly wide range of industry estimates. The key driver of the market for microjets is the on-demand air taxi industry. Those who believe that the time has come for the air taxi industry tend to have higher fleet forecasts while those who are less sanguine about the prospects for the on-demand air taxi industry tend to have more conservative fleet forecasts. If the on-demand air taxi industry does gain widespread acceptance, it will spur the demand for microjets and the general aviation active jet fleet and hours flown could be higher than forecast.

The mix of aircraft operating at most large hubs is also expected to become increasingly complex over the forecast period. The expected large increases in the numbers of regional jets and new microjets will increase the complexities of the national airspace system and make the FAA's job more challenging. The increased complexity of the mix of aircraft serves to compound the increases in workload strictly due to the increasing demand for aviation services projected over the forecast period.

Delays occurred at many U.S. airports in 2006 and could become a critical limit to growth over the forecast period. Based on the 2006 FAA Terminal Area Forecasts, commercial operations at 18 of the 35 Operational Evolution Plan (OEP) airports currently exceed pre-September 11th activity levels. In addition, another four airports are expected to reach or exceed pre-September 11th levels over the next 2 years.¹¹ FAA's forecasts of both demand and workload are unconstrained in that they assume that there will be sufficient infrastructure to handle the projected levels of activity. Should the infrastructure be insufficient and result in more delays, it is likely that the forecasts of both demand and workload would not be achieved.

¹¹ *Detroit and New York Newark in 2007; Baltimore and Phoenix in 2008*